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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,366	01/18/2001	Ulrich A. Muller	060967-0014	7123

9629 7590 01/16/2008  
MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER
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PATEL, JAGDISH

ART UNIT	PAPER NUMBER
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3693

MAIL DATE	DELIVERY MODE
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01/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/764,366

**Applicant(s)**

MULLER ET AL.

**Examiner**

JAGDISH PATEL

**Art Unit**

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-22 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-22, 24-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

1. This communication is in response to amendment filed 10/26/05

### ***Response to Amendment***

2. Claims 1-3, 5-12, 18-22, 24-38 have been amended.
3. Claims 1-3, 5-22, 24-38 are currently pending.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejections.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3, 5-22, 24-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary claim 1 is analyzed. This analysis also applies to independent claims 20 (product) which incorporates the process of claim 1.

Claim 1 is vague and unclear lacking clarity due to the following reasons:

Step (d) recites calculating target position information for each of one or more trading models.

This step renders the claimed invention vague and indefinite because there no correlation of this step with the asset being evaluated. The trading models can provide different outputs depending on the input being provided. Step (d) fails to specify on what basis the “one or more” trading models will calculate the “target position information”.

This step is also indefinite because the phrase “one or more” which suggests multiple permutations and combinations trading models for calculating the target position.

Step (b) recites the parameter “current system position” information without specifying any correlation to the asset being evaluated.

Step (e) is vague because it recites that a bid/ask quote is calculated in response to the quote request information using (at least) a hedging method without specifying the specific relationship of the hedging method to the subject asset whose quote is being calculated. Without defining this correlation, the claim is rendered vague and indefinite because it suggests that *any* hedging method can be implemented in the claimed invention.

### ***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 5-22, 24-38 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

Exemplary claim 1 is analyzed. This analysis also applies to independent claims 20 (product) which incorporates the process of claim 1.

Claims 1-3, 5-22, 24-38 are directed to abstract idea without practical application.

Under the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility a claimed invention must satisfy the requirement that it be directed to a "practical application". In order to meet this requirement, the claimed invention physically transforms an article or physical object to a different state or thing, or ... the claimed invention otherwise produces a useful, concrete, and tangible result.

The claim invention is a process performed by a computer that calculates a bid/ask quote in response to various received inputs and target position information for each of one or more trading models.

The claimed invention must provide a practical application of a judicial exception:

- o Physical Transformation,  
OR
- o Produce A Useful, Concrete, and Tangible Result

The claimed invention is a method that process data and calculated a bid/ask quote based on certain parameters. Therefore, the test of physical transformation is not applicable. Therefore, the claim is analyzed to determine if it produces a "useful, concrete and tangible result".

The claimed invention encompasses any and all types of assets amenable to market making (para [0024] of the disclosure). The claimed invention fails to specify the relationship of the "current system position" to the asset being processed for bid/ask quote. The claimed invention recites that the one more trading model in step (d) calculate "target position information" without providing any connection between the trading models and the asset price data. The term "one or more trading models" raises the issue of indefiniteness because the target position depends on the specific model(s) being used. The claim does not define the trading model in terms of the asset parameters. It broadly recites that "target position information" is calculated for "one or more" trading models. This would produce "one or more target position information". Which of the latter is being applied to step (e) in calculation of the bid/ask quote?

The claim recites that step (e) calculates bid/ask quote using "a hedging method" without defining the hedging method. Thus, any hedging method may be used by a person who practices the invention.

Based on the foregoing analysis it is concluded that the claimed invention is not concrete in that a result cannot be assured or is not reproducible since it would depend on the unknowns identified above.


Since the claimed invention fails to meet at least one requirement of the "useful, concrete and tangible" test of practical application, the claims are interpreted as being directed to an abstract idea and hence rejected under 35 USC 101 as non-statutory subject matter.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748. The examiner can normally be reached on 800AM-630PM Mon-Tue and Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KRAMER JAMES A** can be reached on **(571)272-6783**. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

(Primary Examiner, AU 3693)

1/3/08